

**Detroit Police Department - Aviation Unit  
Review of  
Flight Status of Helicopters**

**October 2000**

## **MEMORANDUM**

**DATE:** January 29, 2001

**TO:** Honorable City Council

**FROM:** Joseph L. Harris  
Auditor General

**RE:** Review of the Flight Status of Detroit Police Helicopters

Attached is our report on the flight status of the helicopters used in the operation of the Police Department's Aviation Unit.

At its July 25, 2000 meeting, the City Council requested that the Office of the Auditor General determine whether police helicopters had been grounded. It was noted that unidentified parties alleged such grounding was due to a lack of parts because certain vendors had not been paid. Pursuant to this request, the Office of the Auditor General undertook a review to determine the past and current flight status of the helicopters used in the operations of the Police Department's Aviation Unit.

A copy of this report will be provided to the Mayor, Detroit Police Department, and the Finance Department.

We appreciate the cooperation extended to us by the employees of the Police Department.

**Detroit Police Department - Aviation Unit  
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Flight Status of Helicopters  
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## **EXECUTIVE SUMMARY**

**Introduction** This report contains the results of our review of the Flight Status of Detroit Police Helicopters completed in October 2000.

- Objectives**
1. To determine the flight status of the helicopters of the Police Aviation Unit for the fourteen and one-half months ended September 15, 2000.
  2. To determine the circumstances pertinent to the flight status of the helicopters of the Police Aviation Unit.

**Conclusion** Three of the four helicopters of the Police Aviation Unit were essentially grounded from early June to late September 2000. The lack of adequate management and planning of the Unit's mechanical maintenance function contributed significantly to the grounding of its helicopters during this period. Although there have been problems paying vendors on a timely basis, this was not the reason the helicopters were grounded during this period.

- Findings**
- Summary of**
1. The aircraft of the Police Aviation Unit have been grounded for significant periods.
  2. There is a need for improved management and planning of the Police Aviation Unit's mechanical maintenance function.
  3. The Police Aviation Unit did not comply with selected purchase order terms.
  4. The Police Aviation Unit does not comply with certain requirements of the City's Purchasing Ordinance.

- Recommendations**
- Summary of**
1. We recommend the Police Department require the Police Aviation Unit to maintain a daily log, which documents the specific reason(s) that each aircraft is not flown. This should be done to provide a basis by which the Department's management and the Police Aviation Unit can take meaningful action to improve the Unit's ability to reduce the time that aircraft are grounded.

2. We recommend the Police Department management and the Police Aviation Unit develop and implement plans and procedures that specifically address the causes for the grounding of aircraft.
3. We recommend the Police Department take the actions necessary, such as providing proper supervisory review and control, to ensure that specific requirements (e.g., timelines of payments) of contract purchase orders of the Police Aviation Unit are complied with.
4. We recommend the Police Department take the necessary actions to comply with the City's Purchasing Ordinance by obtaining proper spending authorization and paying for parts or services only after satisfactory receipt, and by seeking the City Purchasing Director's approval for treating two of its primary vendors as sole source vendors.

## **BACKGROUND**

The Police Aviation Unit has four helicopters for its operations. It has one Bell Model 476-5A helicopter and three Aerospatiale ASTAR Model A5350B helicopters. This fleet is somewhat aged. The Bell helicopter is 27 years old. Two of the Aerospatiale helicopters are 14 years old. The other Aerospatiale helicopter is 12 years old.

The Lieutenant in charge of the Police Aviation Unit stated the mission of the unit to be the following: (1) To provide patrol support; such support is provided by listening to the police scanner and self-deploying where deemed appropriate by unit personnel. (2) To provide support to investigative operations; this is done through the patrol of known areas of criminal activity. An example is rape patrols in support of the investigation into the rape of girls in route to school. (3) To provide support of forensic activities; an example is providing an aerial platform for the photographing of a homicide scene. (4) To assist in the apprehension of fleeing suspects; an example would be the taking over of a car chase. (5) To assist in riot suppression. (6) To provide transport of prisoners; the Police Aviation Unit is responsible for the transport of all prisoners whether by aircraft or automobile. (7) To assist in the protection of dignitaries; examples would be the aerial surveillance of a gathering of the Organization of American States or support of the Secret Service. (8) To provide ceremonial duties; examples would be honorary flights over funerals and parades.

The Police Aviation Unit operates on two shifts, from 7:00 A.M. to 3:00 P.M. and from 3:00 P.M. to 11:00 P.M., normally Monday through Friday. From time to time, the Aviation Unit operates on Saturdays and less frequently on Sundays and holidays. As noted above, the Aviation Unit is self-deploying. One police officer pilot, who was injured in a non-flight related incident, performs security on the midnight shift that runs from 11:00 P.M. to 7:00 A.M. According to information provided to us by the Aviation Unit, in September 2000, there were 18 police officers assigned to the Unit, consisting of five flight-ready pilots, five licensed pilots not permitted by the Department to fly the Aerospatiale helicopters, three designated for training as pilots, and five who served in support roles.

The routine repair and servicing of the helicopters is done under the auspices of the Supervising Aircraft Mechanic, who is a City employee. He is assisted by two Aircraft Mechanics. One is an employee of the City and the second performs under a personal service contract with the City. In October 2000, the Police Aviation Unit was also attempting to obtain the requisite approval from the Finance Department to contract for the personal services of another Aircraft Mechanic. Routine services include all services to the aircraft and the installation of all parts and major components. It does not include the repair of the avionics (i.e., electrical and electronic devices) of the aircraft, which is performed by vendors. In addition, vendors accomplish overhaul of major components, such as the engine and the airframe. The overhaul of major components and parts for the Aerospatiale helicopters are acquired primarily from two vendors—American Eurocopter and Turbomeca Engine Corporation. After-market parts are acquired for the Bell helicopter from any available vendor. The Supervising Aircraft Mechanic stated that the manufacturer of the Bell helicopter has ceased servicing and making parts for the Bell Model 476-5A.

## **AUDIT OBJECTIVES, SCOPE, AND METHODOLOGY**

### **Audit Objectives**

Our audit had two objectives:

- To determine the flight status of the helicopters of the Police Aviation Unit for the fourteen and one-half months ended September 15, 2000.
- To determine the circumstances pertinent to the flight status of the helicopters of the Police Aviation Unit.

### **Audit Scope**

Our investigation focused on determining the flight status of the Police Aviation Unit helicopters for the fiscal year 1999-2000, and the first two and one-half months of the fiscal year 2000-2001.

Our preliminary information indicated that the aircraft were grounded due to the City's failure to pay vendors on a timely basis. This necessitated a review of the procurement function of the Police Department as it affected the Police Aviation Unit.

We also examined the Unit's mechanical maintenance activities to ascertain the effectiveness of that function.

### **Audit Methodology**

We quantified the flight status of helicopters in terms of hours and days of flight over a given period. This was accomplished through the examination and analysis of daily flight records of the aircraft owned by the Police Aviation Unit. We also determined the flight status of the helicopters, and maintenance during the period under review. We interviewed the Supervising Aircraft Mechanic and Police Officer pilots to gain insight into mechanical maintenance issues.

We examined, to the extent possible, records of the requisitions and payments for parts from vendors. We made examination of these records for indications of the time frames within which payments were made, and, to the extent possible, for evidence of the time frames within which the requisitions of parts were made by the mechanical maintenance function in relationship to the condition of the aircraft. We analyzed the Daily Flight Record and the Aircraft Maintenance log for this purpose as well.

Due to the lack of logic in the ordering and filing of accounts payable records, instead of examining a sample of transactions, we reconstructed and examined all transactions for the two major parts vendors. The Unit dealt with only four vendors for parts and service for helicopters for the period from July 1, 1999 to September 15, 2000.

## FINDINGS AND RECOMMENDATIONS

### 1. Aircraft Have Been Grounded for Significant Periods

Schedule A of this report provides a schedule of the hours flown each month by each of the Police Department's aircraft for the fourteen and one-half month period from July 1, 1999 through September 15, 2000.

As shown by Schedule A, which is based on the Daily Flight Records maintained by the Police Aviation Unit, there were significant periods of time when three of the four aircraft did not fly. The Bell helicopter N59402 was seldom flown.

- a. Helicopter N47CD did not fly for a period of more than four-months, from May 5 to September 15, 2000, and also for the four-month period from September to December 1999. Attachment 1 provides details about this helicopter's status from July to September 2000.
- b. Helicopter N48CD did not fly for a period of more than three months, from June 8 to September 15, 2000. Attachment 1 provides details about this helicopter's flight status from July to September 2000.
- c. The Bell helicopter N59402 did not fly for the fifteen-month period from December 1998 to February 2000, and the month of August 2000. For the fourteen and one-half month period from July 1, 1999 through September 15, 2000, the Bell helicopter logged about 45 hours of flight time. This helicopter was basically in a no-flight status (in terms of meeting the Unit's mission) during this fourteen and one-half month period, until a Federal Aviation Administration (FAA) airworthiness directive formally grounded it in September 2000. A satisfactory remedy is not expected to be implemented until April 2001. Attachment 1 provides details about this helicopter's flight status from July to September 2000.

Schedule A also shows that the total flight hours of all aircraft for the 1999-2000 fiscal year was 1,542 hours, or an average of 128.5 hours per month or about 25.7 hours per flight-ready pilot per month.

For the first two and one-half months of the 2000-2001 fiscal year, from July 1 to September 15, 2000, total flight hours of all aircraft were 167 hours for an average of 66.9 hours per month or about 13.4 hours per flight-ready pilot per month.

Another perspective of the flight status of the helicopters is provided by Schedule B, which shows the number of aircraft placed in service per day for the fourteen and one-half months from July 1, 1999 through September 15, 2000.

Over the 250 business days (weekdays, not including holidays), from July 1, 1999 through June 30, 2000 the Unit put up at least one helicopter on 234 (or 95%) of those days. However, for the first 53 business days, in the current fiscal year the Unit put up at least one helicopter only 42 (or 79%) of those days. Schedule B also shows that the Unit put up at least one helicopter less than 50% of the time on weekends and holidays, during the fourteen and one-month period ended September 15, 2000.



Based on our review and analysis, the extent of the grounding of helicopters and the lack of flight time were due in large measure to the need for improved management and planning of the mechanical maintenance activities of the Police Aviation Unit, as discussed in Finding 2. Even though the Police Department has had some problems with paying one of its vendors, American Eurocopter, on a timely basis, we did not find that lack of availability of parts due to nonpayment of vendors caused the three helicopters to be grounded.

Since there is no Departmental or FAA requirement, we were told the Police Aviation Unit does not maintain a record which explains grounding of each aircraft each day. Such a record would indicate whether the aircraft is down for maintenance or cannot fly due to weather conditions.

**We recommend** the Police Department require the Police Aviation Unit to maintain a daily log, which documents the specific reason(s) that each aircraft is not flown. This should be done to provide a basis by which the Department's management and the Police Aviation Unit can take meaningful action to improve the Unit's ability to reduce the time that aircraft are grounded.

## **2. Need for Improved Management and Planning of the Unit's Mechanical Maintenance Function**

Our review indicates that a lack of adequate management and planning of the Police Aviation Unit's mechanical maintenance function has contributed significantly to the grounding of the Police Department's helicopters. Increased management involvement in key decisions and planning related to routine repairs and servicing of the aircraft and to the overhaul of major aircraft components are needed to address and reduce the time aircraft are out of service and grounded.

Some components (e.g., tail rotor gearbox and main rotor gearbox) of the aircraft have predetermined life expectancies or time limits (usually in terms of hours of operation) which are provided by the manufacturer. These life expectancies and time limits are then included in the FAA's regulations to officially recognize the need for required inspection, replacement, and overhaul, after a certain number of hours of flight time. These requirements provide a means by which the Police Aviation Unit and anyone responsible for maintaining aircraft can plan for and anticipate inspection, replacement, or overhaul of particular components of an aircraft.

Although the Unit uses a method it refers to as "Time Tracker", to note the time of FAA-mandated inspections and maintenance and expiration of life-delimited parts and to keep abreast of maintenance requirement for the helicopters, helicopters are often out of service for extended periods of time, as disclosed by Schedule A of this report.

We noted various instances, illustrated by the following examples, where aircraft were out of service for extended periods of time, which could have been reduced with proper management, planning, and anticipation of maintenance and repair requirements.

Two helicopters were recently taken out of service over the same three and one-half month period, which is indicative of a lack of adequate management and planning. Aircraft N47CD was out of service from May 5 to October 9, 2000 for repair of various parts, including its tail rotor and tail rotor gearbox. Aircraft N48CD was also out of service for most of the same time period from June 8 until September 26, 2000, for repair of its tail rotor gearbox. In addition, Aircraft N59402 (the Bell 47G-5A Helicopter), flew for only three hours in June, twenty hours in July, no hours in August, and about thirteen hours between September 4 to 8, 2000, before an

FAA airworthiness directive grounded it for the replacement of its main rotor grips. The Aviation Unit indicates that it will likely be grounded until April 2001, when the necessary parts are scheduled for manufacture. With proper management and planning, the Police Aviation Unit should be able to avoid having three helicopters, representing 75% of its fleet, down at the same time.

In another example, Aircraft N46CD was out of service for about five months from November 28, 1998 through April 20, 1999, due to a required engine overhaul. At the same time, the vendor (Turbomeca Engine Corporation) performing the engine overhaul, provided a temporary rental replacement engine as is the common industry practice, (at the cost of \$9,000) to the Police Aviation Unit. However, the Police Aviation Unit did not install the temporary engine in Aircraft N46CD, apparently based on a decision made by the Supervising Aircraft Mechanic, while waiting return of its overhauled engine. This points to the need for increased involvement by Department management in decisions and activities which impact the flight status of aircraft, such as deciding whether to use a rental engine and for how long and for what cost. With adequate management and planning, including due consideration of available options such as utilization of a temporary rental replacement engine, the Unit should be able to prevent a five-month grounding of an aircraft.

Aircraft N47CD was out of service for 31 days from February 12 through March 15, 1999, waiting replacement of a fuel control unit, whereas, Aircraft N48CD was only out of service for five days in December 1999 for replacement of the same part. With adequate management and planning, there would likely be more consistency in the length of time it takes to replace given parts. Two days later, Aircraft N47CD was out of service again for 49 days from March 18 through May 6, 1999, due to an inoperable rotor tachometer gauge. The gauge was not replaced until May, even though the replacement gauge, which came from Aircraft N46CD, was available in March 1999. With adequate planning, the available sources of parts would likely be more readily identified and utilized.

These cited situations and instances indicate a substantial need for improved management and planning of the mechanical maintenance function. We observed that, too often, the decisions (e.g., rental of temporary replacement components) and processes (e.g., planning), which affect the length of time an aircraft is out of service, are left solely to the discretion of the Supervising Aircraft Mechanic. It is not sufficient to simply remove aircraft from service until repairs are made, without development of a plan, which establishes methods and ways for reducing out-of-service time.

**We recommend** Police Department management and the Police Aviation Unit develop and implement plans and procedures that specifically address the causes for the grounding of aircraft. Such plans should include a detailed outline of anticipated operational activity for each aircraft on an annual basis. Such policies should include increased management control of key decision-making processes, such as the rental of substitutes for major aircraft components under repair and the exchange of worn components for overhauled or new components.

### **3. Lack of Compliance with Purchase Order Terms**

The Police Department did not pay the total amount (\$96,885) owed to the vendor for parts and services provided in July 1998, until nine months later in April 1999. The Purchase Order terms were 0%, 30 days, meaning that payment was due within 30 days of an invoice due date for

parts and services received, with no discount for prompt payment. In addition, Finance Directive No. 143 requires “all City Departments...to pay all appropriate charges delineated on valid invoices within the guidelines set forth within the corresponding contractual agreement”. As a result of the delay in payment of this amount and other smaller amounts, the vendor put the account of the Police Aviation Unit on “hard hold” in October 1999. The vendor would not sell any parts or provide any services to the Police Aviation Unit until the delinquent debt was liquidated. The vendor will no longer extend any credit, and the Police Department must pay in advance for parts or services.

**We recommend** the Police Department take the actions necessary, such as providing proper supervisory review and control, to ensure that specific requirements (e.g., timeliness of payments) of contract purchase orders of the Police Aviation Unit are complied with.

#### **4. Lack of Compliance with City’s Purchasing Ordinance**

The Police Aviation Unit is not complying with the City’s Purchasing Ordinance. It is paying for parts in advance of receipt, and it is treating two vendors as sole source vendors without the required certification of the City’s Purchasing Director.

Due to the “hard hold” status of its account with American Eurocopter, all purchases by the Police Aviation Unit from American Eurocopter since September 30, 1999, have been made before proper spending authorization was obtained.

Also, the Police Aviation Unit has treated American Eurocopter as a sole source vendor of parts for its Aerospatiale ASTAR helicopters even though it has made some purchases from another vendor, Alternate Aviation Company. American Eurocopter has not been certified by the City’s Purchasing Director as a sole source vendor. The Police Aviation Unit has also treated Turbomeca Engine Corporation as a sole source vendor, even though it has not been certified by the City’s Purchasing Director as a sole source vendor.

Section 18-5-2 of the Detroit City Code specifies that purchases be made in the following manner. Where a purchase involves a major expenditure, competitive bids must be procured, a solicitation of bids must be advertised, and the purchase contract must be awarded to the lowest bidder provided that bidder is able to perform. The procedure listed may be waived where: “(1) The expenditure involved is not major; (2) Public exigencies require the immediate delivery of the articles or performance of the service; (3) Only one source of supply is available, and the purchasing director so certifies; (4) The services to be performed are professional in nature; or (5) The item to be acquired is rare or unique in nature.” Where a purchase does not involve a major contract (less than \$2,000), the advertising of the solicitation of the bid is not required.

**We recommend** the Police Department take the necessary actions to comply with the City’s Purchasing Ordinance by obtaining proper spending authorization and paying for parts or services only after satisfactory receipt, and by seeking the City Purchasing Director’s approval for treating two of its primary vendors as sole source vendors.

**Schedule A**

Detroit Police Department - Aviation Unit  
**Schedule of Hours Flown By Month By Aircraft**  
For the Fourteen and One-Half Months Ended September 15, 2000

Month	Number of Hours Flown				
	Aerospatiale	Aerospatiale	Aerospatiale	Bell	Total
	ASTAR	ASTAR	ASTAR	47G-5A	
	Helicopter	Helicopter	Helicopter	Helicopter	
	N46CD	N47CD	N48CD	N59402	Flight Hours
FY 1999/2000					
July, 1999	50.2	44.1	5.2	0.0	99.5
August, 1999	1.4	27.9	32.5	0.0	61.8
September, 1999	87.4	0.0	60.6	0.0	148.0
October, 1999	95.6	0.0	24.4	0.0	120.0
November, 1999	82.3	0.0	54.0	0.0	136.3
December, 1999	73.1	0.0	73.3	0.0	146.4
January, 2000	30.2	37.1	85.0	0.0	152.3
February, 2000	10.6	69.6	73.5	0.0	153.7
March, 2000	72.9	38.5	65.7	4.4	181.5
April, 2000	22.3	41.3	45.9	2.1	111.6
May, 2000	103.1	14.6	37.3	3.0	158.0
June, 2000	41.6	0.0	28.9	2.6	73.1
FY 1999/2000 Total	670.7	273.1	586.3	12.1	1542.2
Avg Flight Hours Per Mo.	55.9	22.7	48.9	1.0	128.5
Avg Flight Hrs/ Pilot/ Mo.*					25.7
FY 2000/2001					
July, 2000	19.5	0.0	0.0	19.8	39.3
August, 2000	59.3	0.0	0.0	0.0	59.3
September 1 to 15, 2000	56.0	0.0	0.0	12.7	68.7
FY 2000 Total thru Sep. 15	134.8	0.0	0.0	32.5	167.3
Avg Flight Hours Per Mo.	53.9	0.0	0.0	13.0	66.9
Avg Flight Hrs/ Pilot/ Mo.*					13.4

Source: Daily Flight Records for the Four Helicopters of the Detroit Police Aviation Unit

\* Average Flight Hours Per Pilot Per Month assumes a uniform staffing of 5 flight-ready pilots for the entire fourteen and one-half month period.

**Schedule B**

Detroit Police Department - Aviation Unit  
**Number of Aircraft Placed in Service Per Day**  
For the Fourteen and One-Half Months Ended September 15, 2000

Type/ Number of Days/ Period of Time	Zero Helicopters		One Helicopter		Two Helicopters		Three Helicopters		Four Helicopters		Total	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
	of Days	of Total	of Days	of Total	of Days	of Total	of Days	of Total	of Days	of Total	of Days	of Total
<b>Business Days</b>												
250 Days												
7/01/99 thru 6/30/00	16	6.4%	114	45.6%	105	42.0%	14	5.6%	1	0.4%	250	100.0%
<b>Weekends and Holidays</b>												
116 Days												
7/01/99 thru 6/30/00	60	51.7%	45	38.8%	11	9.5%	0	0.0%	0	0.0%	116	100.0%
<b>Business Days</b>												
53 Days												
7/01/00 thru 9/15/00	11	20.8%	36	67.9%	6	11.3%	0	0.0%	0	0.0%	53	100.0%
<b>Weekends and Holidays</b>												
24 Days												
7/01/00 thru 9/15/00	<u>14</u>	58.3%	<u>9</u>	37.5%	<u>1</u>	4.2%	<u>0</u>	0.0%	<u>0</u>	0.0%	<u>24</u>	100.0%
<b>Total</b>												
443 Days												
7/01/99 thru 9/15/00	<u>101</u>	22.8%	<u>204</u>	46.0%	<u>123</u>	27.8%	<u>14</u>	3.2%	<u>1</u>	0.2%	<u>443</u>	100.0%

Source: Daily Flight Records for the Four Helicopters of the Detroit Police Aviation Unit

## **Attachment 1**

### **Detail About the Conditions of the Grounded Aircraft**

The following paragraphs present details about the specific mechanical conditions of each of the three helicopters that were grounded from July to September 2000.

#### **Aircraft N47CD**

Aerospatiale ASTAR Helicopter, Model No. A5350B, Serial No. 1879

Aircraft N47CD was in a no-flight status for at least 158 days, beginning May 5, 2000 and continuing through October 9, 2000, the day of the completion of the field investigation related to this report. Neither the Daily Flight Record nor the Aircraft Maintenance Log indicated any reason for the no-flight status of this helicopter. We observed that the main rotor blades had been removed from the helicopter. The Supervising Aircraft Mechanic indicated that one of the blades had been damaged in an accidental collision with a component of the hangar. This occurred in May 2000, upon a daily movement of the helicopter into the hangar. Such movements of the helicopters are made after each flight. The Supervising Aircraft Mechanic further noted that the blade had been shipped to American Eurocopter on or about May 13, 2000. The blade was repaired and returned to the Police Aviation Unit near the end of June, 2000. We observed that the blade was in a shipping crate stored in the hangar.

We also observed that the tail rotor and tail rotor gearbox had been removed from the aircraft. The tail rotor was stored in the workshop of the hangar. The Supervising Aircraft Mechanic indicated that the tail rotor gearbox was transferred to the helicopter registered as N46CD. This is confirmed by the Daily Flight Record and the Maintenance Log for N46CD. The Supervising Aircraft Mechanic indicated that the following additional minor parts were needed to bring N47CD back to operating condition: a cooler blower, a PC board, and two blower motors. He indicated that these parts had been ordered from American Eurocopter. The tail rotor gearbox taken from N46CD, which would be reinstalled to N47CD, was in the custody of American Eurocopter.

#### **Aircraft N48CD**

Aerospatiale ASTAR Helicopter, Model No. A5350B, Serial No. 2032

Aircraft N48CD was taken out of service on June 8, 2000 and remained out of service for 110 days, until September 26, 2000. There was no indication in the Daily Flight Record or the Maintenance Log of the reason the aircraft was out of service during this period. We observed that the tail rotor gearbox was not on the aircraft. The Supervising Aircraft Mechanic stated that the tail rotor gearbox had been removed from the aircraft on or about July 10, 2000. Upon a routine daily inspection, the chrome on the output shaft around which the tail rotor revolved was noted to be worn. More specifically, a groove had been worn into the chrome. The entire tail rotor gearbox was shipped to American Eurocopter on or about July 12, 2000. The tail rotor gearbox was repaired and returned to the Police Aviation Unit on or about August 8, 2000.

**Attachment 1**  
(continued)

**Aircraft N59402**

Bell Helicopter, Model No. 476-5A, Serial No. 25139

Aircraft N59402 last saw regular duty in the fiscal year, 1998-1999. From July 1999 through the middle of September 2000, a fourteen and one-half month period, Aircraft N59402 was flown for a total of only about 45 hours before an airworthiness directive of the Federal Aviation Administration (FAA) grounded it. The FAA airworthiness directive mandated that the main rotor grips be replaced. The Supervising Aircraft Mechanic did not provide a copy of that directive as we requested. Instead, he provided a letter from a vendor, Helicopter Spares, Inc., which noted the issuance of the directive and stated that the needed parts were not available on the open market. The vendor, an after-market manufacturer, indicated in the letter that it would not undertake a production run for the needed parts until April 2001.